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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/138,054	08/21/1998	RAMANATHAN RAMANATHAN	INTL-0084-US	3628

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EXAMINER
VU, NGOC K

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/138,054	Applicant(s) RAMANATHAN, RAMANATHAN
	Examiner Ngoc K. Vu	Art Unit 2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/16/03* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17,19-23 and 25-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-12,14,15,21,27,31,33,35 and 37* is/are rejected.

7)☒ Claim(s) *2,3,12,13,16,17,19,20,22,23,25,26,28-30,32,34,36 and 38* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Applicant's appeal brief filed on 4/16/03 has been considered. The final rejection mailed 9/4/02 is hereby withdrawn, in view of the newly discovered Rao. Any inconvenience to applicant is regretted.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 5, 7-9, 14, 21, 27, 31, 33, 35 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Rao (US 5,506,844 A).

Regarding claim 1, Rao discloses a transmission system, comprising: a data management module (rate control encoder 302) capable of managing data flow; and a transmitter module (multiplexer 300) couple to a transport medium (channel 330) and to the data management module (302), the transmitter module to contain configuration information (static table) specifying at least one predefined transmission characteristic (the multiplexer contains the static table has an entry for each unit of encoded data that can be transmitted over communication channel 330), the data management module to access the configuration information to determined the predefined transmission characteristic and modify the data flow management based on the at least one predefined transmission characteristic (the encoder changes the rate of data with respect to the adjusted data rate from the multiplexer 300, wherein the table utilized by multiplexer 300 to allocate each unit of data that can be transmitted over communication channel 330) (see col. 5, lines 61-65; col. 6, lines 40-67; col. 7, lines 13-20, 26-27).

Regarding claim 14, Rao discloses a transmission system comprising: a data management program capable of assembling data (rate control encoder 302 encodes data in

the form of packets); a transmitter (multiplexer 300) capable of receiving data from the data management program and transmitting the data to a transport medium (channel 330); and a communication interface (360, 1210) between the data management program and the transmitter that enables the data management program and transmitter to negotiate the type of communication to be performed (the encoder and multiplexer communicate to each other via interface 360, 1210 to change the rate of data), the transmitter to contain configuration information specifying a characteristic of the transmitter (the multiplexer contains the static table has an entry for each unit of encoded data that can be transmitted over communication channel 330), the data management program to access the configuration information of the transmitter and to modify management of data flow based on the configuration information (the encoder changes the rate of data with respect to the adjusted data rate from the multiplexer 300, wherein the table utilized by multiplexer 300 to allocate each unit of data that can be transmitted over communication channel 330) (see col. 5, lines 61-65; col. 6, lines 40-67; col. 7, lines 13-20, 26-27 and figures 3 and 12).

Regarding claim 21, Rao discloses a computer-readable medium storing a program (software) executable by a computer in a transmission system (all systems or devices are provided with programs or software which are necessary to make the systems or devices execute the functions for transmission) including a transmitter (multiplexer 300) coupled to a transport medium (channel 330), the program comprising instructions for causing the computer to retrieve stored information to identify at least one transmission characteristic of the transmitter (the multplexer assesses the predetermined code in the static table to identify a variable data rate, wherein the static table has an entry for each unit of encoded data that can be transmitted over communication channel 330); and modify data flow management based on the identified at least one transmission characteristic (the encoder changes the rate of data with

respect to the adjusted data rate from the multiplexer 300, wherein the table utilized by multiplexer 300 to allocate each unit of data that can be transmitted over communication channel 330) (see col. 5, lines 61-65; col. 6, lines 40-67; col. 7, lines 13-20, 26-27).

Regarding claim 27, Rao discloses a method of managing data flow over transport medium in an interactive transmission type, comprising: accessing stored configuration information; identifying at least one transmission characteristic of a transmitter (multiplexer 300) used to transmit data over the transport medium (the multplexer assesses the predetermined code in the static table to identify a variable data rate, wherein the static table has an entry for each unit of encoded data that can be transmitted over communication channel 330); and modifying data flow management based on the identified at least one transmission characteristic (the encoder changes the rate of data with respect to the adjusted data rate from the multiplexer 300, wherein the table utilized by multiplexer 300 to allocate each unit of data that can be transmitted over communication channel 330) (see col. 5, lines 61-65; col. 6, lines 40-67; col. 7, lines 13-20, 26-27).

Regarding claim 4, Rao discloses that the static table can has entry for each unit of encoded data that can be transmitted over communication channel 330 in the predetermined time interval (see col. 7, lines 17-19).

Regarding claim 5, Rao discloses that an interface (360, 1210) between the encoder and the multiplexer (see figures 3 and 12).

Regarding claims 7 and 9, Rao discloses that the multiplexer contains the static table has an entry for each unit of encoded data that can be transmitted over communication channel 330 in the predetermined time interval (see col. 7, lines 17-19 and 46-56). Further regarding claim 9, Rao discloses that multiplexer includes controller 310 analyzing the collected data and

adjusts the rate for each variable rate encoder 302 (see col. 5, lines 61-65; col. 6, lines 65-67; col. 7, lines 5-8 and 17-19).

Regarding claim 8, Rao discloses that the multiplexer adjusts the data rate to maintain a measure of distortion for each variable rate application below a predeterimed limit (see col. 6, lines 50-54).

Regarding claims 31, 33, 35 and 37, Rao discloses the configuration information to specify maximum transfer rate, maximum size of each data packet, and usage of compression (see col. 7, lines 3-8 and 46-54).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 6, 10, 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao (US 5,506,844 A).

Regarding claim 6, Rao shows an interface (360, 1210) between the encoder and the multiplexer (see figures 3 and 12). Rao does not disclose the interface including an API interface. Official Notice is taken that utilizing API interface for compatible communication between the different protocols in data communication system is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify Adams by including API as interface for compatible communication between the different protocols.

Regarding claims 10 and 15, Rao discloses that video data can also be applied to other signal sources that are transmitted over a communication channel (see col. 5, lines 51-55), and

the data is converted to digital format (see col. 31, lines 43-45). Rao does not disclose providing the digital data with television data to transmit over the transport medium. Official Notice is taken that transmitting the digital data with television data is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify Rao by providing the digital data with television data to provide the television program to the viewer.

Regarding claim 11, Rao does not disclose the transport medium specifically. Official Notice is taken that utilizing medium such as satellite transmission or cable transmission is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art to modify Rao including satellite transmission or cable transmission in order to transmit the data with high quality, stability and reliability.

Allowable Subject Matter

5. Claims 2, 3, 12, 13, 16, 17, 19, 20, 22, 23, 25, 26, 28-30, 32, 34, 36 and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 703-306-5976. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

NV
June 25, 2003

ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600